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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,596	02/20/2002	Serge Willenegger	020267	9632

23696 7590 11/21/2003

Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER

LELE, TANMAY S

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 11/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/081,596

Applicant(s)

WILLENEGGER, SERGE

Examiner

Tanmay S Lele

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: "PAE" in paragraph [1032] (assumed to be "PAR"). Appropriate correction is required.

Claim Objections

2. Claim 1 is objected to because of the following informalities: "... if the spreading code if used by another channel in the wireless communication system," was assumed to read as "... if the spreading code *is* used by another channel in the wireless communication system...". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 6, it was not understood what was being referred to by the "modulation pair selection unit." Applicant discloses a "transmission pair selection unit" (paragraph 1041 for example). For purposes of examination, it was assumed the "modulation pair selection unit" was the described "transmission pair selection unit." Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1, 2, 5, and 6 are rejected under 35 U.S.C. 102(a) as being anticipated by Wang et al. (Wang, World International Publication Number WO 01/18987).

Regarding claims 1 and 5, Wang teaches of in a wireless communication system, a method and apparatus comprising: determining a transmission configuration for a first channel as a function of Peak-to-Average Ratio (PAR) on the first channel, the transmission configuration including a spreading code and a modulation path (starting page 5, line 30 and ending page 6, lines 10; page 6, lines 14 – 21); if the spreading code is used by another channel in the wireless communication system, updating the transmission configuration as a function of PAR (page 6, lines 14 – 32; page 7, lines 10 – 32); and applying the transmission configuration to the first channel (starting page 5, line 30 and ending page 6, lines 10).

Regarding claim 2, Wang teaches all the claimed limitations as recited in claim 1. Wang further teaches of wherein the modulation path is selected from an In-phase (I) branch and a Quadrature (Q) branch (pages 6, lines 3 – 7; page 7, lines 5 – 9).

Regarding claim 6, Wang teaches of a wireless apparatus, comprising: modulation pair selection unit for determining a modulation pair based on Peak-to-Average Ratio (PAR); and selector coupled to the modulation pair selection unit (starting page 5, line 30 and ending page 6, lines 10; page 6, lines 14 – 21), that selects a modulation path based on the modulation pair (Figure 7 and starting page 5, line 30 and ending page 6, lines 10; page 6, lines 14 – 21 and page 12, lines 1 – 13).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (Wang, World International Publication Number WO 01/18987) as applied to claim 2 above, and further in view of Choi et al (Choi, US Patent Application No. 2002/0018457).

Regarding claim 3, Wang teaches all the claimed limitations as recited in claim 2. Wang further teaches of on an uplink in the wireless communication system (page 7, lines 22 –28) but not specifically of wherein the first channel is a dedicated physical channel.

In a related art dealing with channel allocation in a CDMA system, Choi teaches of wherein the first channel is a dedicated physical channel (paragraph 0027 and 0007 and 0033).

It would have obvious to one skilled in the art at the time of invention to have included into Wang's transmission system, Choi's channel system, for the purposes of providing a solution to channel allocation in an OVSF code system (which experience channel allocation problems) as taught by Choi.

Regarding claim 4, Wang in view of Choi teach all the claimed limitations as recited in claim 3. Choi further teaches of wherein the wireless communication system includes a plurality of dedicated data channels (paragraph 0027, 0033, and 0127) and at least one dedicated control channels (paragraph 0027, 0033, and 0127).

Citation of Pertinent Prior Art

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Inventor	Publication	Number	Disclosure
Sillberger et al.	US Patent	6,028,884	Test method for measuring non-linear communication effects
Deane et al.	US Patent	6,278,702	CDMA signals dynamic range reducing apparatus for input of base station RF power amplifiers
Honkasalo	US Patent	6,137,789	Mobile station employing selective discontinuous transmission for high speed data services in CDMA multi-channel reverse link configuration
Khalona	US Patent	6,240,081	Multicode CDMA transmitter with improved signal processing
Yang et al.	US Patent	6,504,862	Method and apparatus for reducing the ratio of peak to average power in a Gaussian signal including a CDMA signal

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanmay S Lele whose telephone number is (703) 305-3462. The examiner can normally be reached on 9 - 6:30 PM Monday – Thursdays and on alternate Fridays.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A. Maung can be reached on (703) 308-7745. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Art Unit: 2684

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.


Tanmay S Lele
Examiner
Art Unit 2684

tsl
November 4, 2003


NAY MAUNG
SUPERVISORY PATENT EXAMINEE